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Mixed methods evaluation of an educational intervention to change mental health nurses' attitudes to people diagnosed with borderline personality disorder

Running title: An intervention to improve BPD-related attitudes

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ABSTRACT

Aims and objectives: To evaluate and explore mental health nurses' responses to and experience of an educational intervention to improve attitudes towards people with a diagnosis of Borderline Personality Disorder. Report findings are concordant with relevant EQUATOR guidelines (STROBE and COREQ).

Background: Attitudes towards people with a diagnosis of Borderline Personality Disorder are poorer than for people with other diagnoses. There is limited evidence about what might improve this situation. One intervention with reportedly good effect uses an underlying biosocial model of borderline personality disorder. No previous intervention has been co-produced with an expert-by-experience. We developed and delivered a 1-day intervention comprising these elements.

Design: A mixed-methods design was used comprising prospective within-subjects cohort intervention and qualitative elements. Participants were mental health nursing staff working in inpatient and community settings in one NHS Board in Scotland, UK.

Methods: Measurement of cognitive and emotional attitudes to people with a diagnosis of borderline personality disorder at pre- and post- intervention (N =28) and at 4-month follow-up. Focus groups were used to explore participants' experiences of the intervention (N =11).

Results: Quantitative evaluation revealed some sustained changes consistent with expected attitudinal gains in relation to the perceived treatment characteristics of this group, the perception of their suicidal tendencies, and negative attitudes in general. Qualitative findings revealed some hostility towards the underpinning biosocial model and positive appreciation for the involvement of an expert-by-experience.

Conclusions: Sustained benefits of an educational intervention for people working with people diagnosed with BPD in some but not all areas. Participants provided contrasting messages about what they think will be useful.

Relevance to clinical practice: The study provides further evidence for incorporation of a biosocial model into staff training as well as the benefits of expert-by-experience co-production. Mental health nurses, however, believe that more well-resourced services are the key to improving care.

Keywords: Borderline personality disorder, mental health nurses, attitudes, pre- post- survey design, qualitative research, mixed methods

Impact Statement:

What does this paper contribute to the wider global clinical community?

- Further demonstrates the difficulty of shifting nurses' attitudes to people with a borderline personality disorder diagnosis
- Shows the value added to education by the incorporation of expert-by-experience input
- Suggests new approaches to addressing this important issue.

INTRODUCTION

People who are diagnosed with borderline personality disorder (BPD) experience pervasive, persistent instability of affective regulation, self-image, impulse control, behaviour and interpersonal relationships (Lieb et al. 2004). Up to 6% of adults meet diagnostic criteria during their lifetime, and the condition is associated with substantial psychiatric and physical morbidity (Grant et al. 2008). Management of people diagnosed with BPD is resource-intensive; there is a high rate of self-harm associated with disproportionate use of emergency (Elisei et al. 2012) and inpatient mental health services (Hayashi et al. 2010; Comtois & Carmel 2014).

As a group, people with a BPD diagnosis are unpopular among mental health practitioners (Cleary et al. 2002) who respond to them in ways which could be disconfirming (Fraser & Gallop 1993), stigmatising (Aviram et al. 2006), or otherwise qualitatively different from how they respond to others, usually negatively so (Markham & Trower 2003).

A recent integrative, systematic review of the relevant literature (Dickens et al. 2016a) indicates that, of all practitioners involved in their care, nurses hold the poorest attitudes relative both to other disciplines and those with non-BPD diagnoses. Even recent studies suggest this is an ongoing problem (Bodner et al. 2015; Kale & Dantu 2015; Knaak et al. 2015). Such practice potentially brings mental health nurses into conflict with their professional requirements to act as a role model of integrity and leadership to others (e.g., Nursing and Midwifery Council 2015). It is important, therefore, that nurses receive effective ongoing support and education related to the characteristics, needs, and treatment of this group.

Background

While several educational approaches have been trialled (Clark et al. 2015; Commons Treloar & Lewis, 2008; Hazelton et al. 2006; Herschell et al. 2014; Knaak et al. 2015; Krawitz 2004; Miller & Davenport 1996; Shanks et al. 2011; Stringer et al. 2011) there is limited evidence about which demonstrably improve nurses' attitudes. A systematic review of existing studies involving an intervention to improve nurses' attitudes revealed either no effect or a small effect size for 74% of all 35 measured outcomes, a medium effect size for 20%, and a large effect size for 6% (Dickens et al. 2016b). Clark et al.'s (2015) evaluation of an educational intervention was responsible for the large effect sizes, and three of the seven medium effect sizes. The intervention, 'the science of borderline personality disorder' was based on work by Porr (2010) and draws on the theoretical work of Linehan (1993). From these perspectives, BPD has a biosocial aetiology in which biological predisposition coupled with an early and continuing invalidating environment are implicated. The training intervention is premised on the theory that providing insight into the neurobiological aspects of BPD and their interplay with an invalidating social environment will challenge assumptions that behaviours characteristic of the BPD-diagnosed individual results from a

'character flaw' or 'bad parenting' (Porr, 2011). This is consistent with evidence that views of mental illness arising from personal weakness are associated with greater stigmatising attitudes than those emphasising the role of medical illness (Jorm & Griffiths, 2008).

Our review (Dickens et al. 2016b) also revealed an absence of intervention studies which were explicitly informed by or developed by individuals with BPD-related expertise-by-experience. Despite growing recognition of the need for co-production of mental health services (Bradley 2015), the involvement of service users in research is less well-documented and there is considerable scope to develop approaches that are informed by an expert-by-experience perspective. For example, Pinfold et al. (2015) consider that co-production can provide a healthy challenge to traditional research hierarchies as it addresses inequalities in power and control within research projects. In view of the lack of service user input into programmes in this area to date, we approached the development of an educational intervention aimed at improving staff's attitudes and knowledge regarding people with a BPD diagnosis collaboratively as a team comprising clinicians, nurse academics, and an individual with expertise-by-experience.

Aim of the present study

We developed 'Positive About Borderline' for mental health nursing staff. It is a 1-day BPD-related training programme comprising two key elements: i) 'The science of borderline personality disorder' (see Clark et al., 2015); and ii) 'Wot R U Like?' an expert-by-experience designed programme involving shared experience and practical advice on working with people with this diagnosis. The overall aim of the current study was to evaluate the intervention pilot. Specific objectives were i) to establish the potential of the intervention

to improve attitudes related to the characteristics of people with a diagnosis of BPD, the functionality of their self-harming and suicidal behaviour, and the utility of treatment approaches for the condition; and ii) to inform quantitative findings by exploring participants' views about the intervention in order to inform future development. This report has been prepared in adherence to relevant EQUATOR guidelines (STROBE; von Elm et al., 2007) (See Supplementary file 1).

METHODS

Design

This was a mixed-methods study. Attitudinal and knowledge-related outcomes were determined at three time points (pre- and post-intervention and 4-month follow-up) within a prospective uncontrolled cohort intervention design. Focus groups were conducted with participants 4 months after the intervention and the resulting qualitative data were subject to thematic analysis.

Setting and Participants

The intervention was delivered at a single NHS site in Scotland. Eligible participants were all of the clinical nursing staff working in one adult acute inpatient ward and in one community day hospital team from a single NHS Board.

The Intervention

Positive About Borderline was delivered as a whole day program in two parts: Part one: 'The Science of BPD' was delivered as a 3-hour session comprising presentation of material about the epidemiology and aetiology of BPD grounded in a biosocial understanding of the disorder together with discussion and activities. More details can be found in Clark et al. (2015) and Porr (2010).

Part two: 'Wot R U Like?' was also a 3-hour session involving presentation, activity, and discussion. This element was designed to help clinicians promote the development of self-awareness in people with a BPD diagnosis, based on the premise that increased awareness of self can be the first step towards positive change. Author JM, a former teacher who herself has a diagnosis of BPD, created the resource in 2014/15 in response to a lack of resources for people with a BPD diagnosis, as identified by author NM (at that time, JM's community mental health nurse). The programme comprises: i) an introductory booklet, 'Borderline Personality Disorder: A Personal Story' which outlines some of the challenges JM has faced over the years as a person living with BPD, and the coping strategies she has employed in an attempt to overcome them; and ii) introduction of a package of activities and resources (including e.g., flash cards, suggested talking points etc.) designed to aid clinicians in working with people with a BPD diagnosis and covering four key concepts, each related to DSM-5 diagnostic criteria for BPD (American Psychiatric Association, 2013): Feelings, thoughts, and behaviours; relating to others; identity; and planning for the future (see www.jomullen.com/wot-r-u-like).

Procedure

The study was approved by Abertay University Ethics Committee and NHS Fife Research & Development Department. In order to facilitate the attendance of as many staff as possible the intervention was delivered on two separate occasions on consecutive days with staff invited to attend one or the other session; both sessions involved mixed groups which comprised individuals working in inpatient and community settings. Attendees were provided in advance with a Participant Information Sheet. At the beginning of each of the two iterations of the intervention, the research team again described the study and answered any questions. Participation was optional and those willing to participate were assigned codes to allow matching of baseline responses with subsequent administrations of the outcome measures. The Science of BPD was delivered in the morning (EL/DB) and Wot R U Like? (JM/NM) in the afternoon. Study questionnaires, all paper based, were completed on three occasions: once prior to the commencement of the intervention, again at the end of the day's training, and on a third occasion 4 months following the intervention. For the follow-up iteration we posted study questionnaires to participants at their work address. We provided an unmarked envelope for respondents to deposit their completed questionnaire and a collection box was provided in each unit. After a two-week period completed questionnaires were collected.

Participants were also invited to one of two focus groups 4 months following the intervention. Focus groups, facilitated by EL/FS (Group 1) and GLD (Group 2), were chosen as they mirrored the group-format learning experience and are known to support a rich understanding of participants' experiences and beliefs (Holloway & Galvin, 2016). For logistical reasons, the focus groups were conducted separately: one in the hospital in which the acute inpatient ward was located and one in the community day hospital around 20 miles away. As a result, nurses attended the focus group with their immediate colleagues and not in

mixed groups. Prior to commencement, the purpose of the group was explained, and informed consent taken. Each focus group commenced with introductions and was guided from a pre-prepared topic list. Each was audio-recorded, transcribed verbatim, and anonymised by removing identifying details and applying coding thus: community day hospital group (DH), acute inpatient ward group (AW), and pseudonyms; additional field notes were taken to aid comprehension of the audio recordings. Focus groups lasted between 60 and 90 minutes.

Measures

Borderline Personality Disorder-Cognitive Attitudes Inventory (BPD-CAI) and Borderline Personality Disorder-Emotional Attitudes Inventory (BPD-EAI; Bodner et al., 2011)

These tools, comprising 47- and 20-items respectively, have been used in studies in Israel (Bodner et al., 2011, 2015). Both scales comprise statements for which respondents indicate their level of agreement ('strongly disagree' to 'strongly agree') on a 5-point Likert scale. Some items are reverse-scored. The BPD-CAI contains three factors: *treatment characteristics of people with BPD* (sample item: 'BPD patients will benefit from rehabilitation in hostels'); *perception of suicidal tendencies in people with BPD* ('Death by suicide in BPD patients is inevitable'); and *antagonistic judgements about people with BPD* ('Psychotic manifestations among BPD patients are in fact malingering'). Internal reliability for the three subscales has been reported to be 0.87, 0.71, and 0.70 respectively (Bodner et al., 2011). On inspection, we felt that a number of statements did not make sense in a UK-service context and amended the wording accordingly. The BPD-EAI comprises three factors: *negative emotions* (α=0.84; sample item: 'When I treat a BPD patient, I easily get

furious'); *experienced treatment difficulties* (α=0.75; sample item: 'Treating BPD patients can wear me out'); and *empathy* (α=0.60; sample item: ' I feel empathy toward BPD patients').

BPD Knowledge Questionnaire

The Borderline Personality Disorder Questionnaire (Cleary et al., 2002) has been used widely to explore staff knowledge, current practice, perceived knowledge and confidence, management attitudes, views on staff resources, and further education requirements related to BPD. The knowledge section of the tool comprises 7 statements (see Table 1) with which participants are invited to agree or disagree. A total score is calculated for each participant (possible total score range = 0-7).

Focus group schedules

A semi-structured focus group schedule was designed with reference to the study aims and piloted for face validity among an experienced group of mental health nurse academics. Domains covered participants' views of the training programme itself, content and delivery; preconceptions and attitudes towards BPD both before and after the training; exploring whether the training had enabled new approaches, and whether there had been any change in practice; and the value of lived experience and service user involvement in training. Participants were encouraged to discuss related topics that arose with the style being flexible and guided by open questions.

Data Analysis

Quantitative data

Demographic details of participants and their responses to the BPD knowledge questionnaire were subject to descriptive analyses. Attitudinal data were examined for normality of distribution. To determine whether construct validity was retained in the wording-amended BPD-CAI and BPD-EAI we calculated internal reliability (Cronbach's α) for all questionnaire subscales. Cut-offs denoting the level of internal reliability were taken from George and Mallery (2003): 0.6 = questionable, 0.7 = acceptable, 0.8 = good, and 0.9 = excellent. Where internal reliability fell short of the acceptable value of α=0.7 we determined whether this could be rectified through item removal by examination of item-total correlations. Finally, changes in primary outcomes measures were calculated using Friedman's test to examine the significance of global change across outcomes points and, where this was found, Wilcoxon tests to determine the pairs of scores with significant differences. The effect size (Cohen's *d*) of significant pair-level changes was calculated and can be interpreted thus: 0.2 small effect size; 0.5 moderate effect size; and 0.8 large effect size (Cohen, 1977). All data were analysed using SPSS v 23.0 (SPSS Inc, Chicago: IL, 2013).

Qualitative data

We retained awareness of our own potential for bias or position in the research: the three authors responsible for the qualitative analysis being experienced mental health nurses (GLD/EL), and a counsellor (FS). We had no prior commitment to any specific outcome, though naturally we hoped that the intervention would be valued by attendees. Author GLD was partly employed by the NHS Board involved at the time of the study but was not influenced to report findings in any particular way.

Analysis followed the six-steps described by Braun and Clarke (2006). This was a dynamic process consisting of examining the data through to analysis and theoretical considerations, then re-examining the data and coding frame to compare and identify similarities and differences between emerging themes. This was then reviewed by comparing the transcripts with the coding frame, synthesising the data then identifying high level themes and reaching a consensus (Braun & Clarke, 2006). Finally, a draft version of the paper, including a provisional analysis and discussion section, were circulated and an opportunity given to all authors to comment or suggest changes. We treated the data corpus as a single entity rather than analysing the focus groups separately.

RESULTS

In total, 28 participants attended one of the 'Positive About Borderline' training days, all completing the questionnaire battery before and after the session. Sixteen people returned follow-up questionnaires at 4-month follow-up and *n*=11 attended one of two focus groups at the 4-month mark. Demographic details of the participants at each stage of the study are outlined in Table 1.

Borderline Personality Disorder cognitive and emotional attitudes scales

Cronbach's α coefficients for the BPD-EAI were 0.897 (*negative attitudes*), 0.782 (*difficult to treat*) and 0.451 (*empathy*). No single or multiple-item combination of item deletions were identified which would raise the internal reliability of the latter to a level of acceptability. For the BPD-CAI Cronbach's alpha coefficients were 0.647 (*treatment characteristics*), 0.716 (*perception of suicidal tendencies*) and 0.657 (*antagonistic judgements*). Inspection of item-total correlations revealed that deletion of one item from the *treatment characteristics*

subscale ('When a new patient is identified to ward staff as an individual with BPD, the staffs' reactions will be similar to those for psychotic patients') would result in a revised Cronbach's $\alpha = 0.724$. However, no number of item deletions could increase the internal reliability of the *antagonistic judgements* subscale above the acceptable threshold. The final outcomes variables used were the two unchanged BPD-EAI subscales *(negative attitudes and difficult to treat)*, the BPD-CAI *suicidal tendencies* and *treatment characteristics* subscales, the latter with one item omitted. The third BPD-CAI subscale, *antagonistic judgements*, was retained despite its questionable internal reliability and is flagged as such for transparency. Thus, of the five subscales used as outcomes measures, one had good internal reliability, three had acceptable internal reliability and one had questionable internal reliability.

Cognitive and emotional attitudinal outcomes

Statistically significant changes occurred for the cognitive attitudes factor scores in relation to the *treatment characteristics* of people with BPD, and their perceived *suicidal tendencies* from T1 to T2 (see Table 2). In both cases these were increased scores, indicating a positive change of attitudes in these areas and both were large changes in terms of effect size. Change in relation to perceived *treatment characteristics* had been sustained by the 4-month follow-up, while that for the perceived *suicidal tendencies* subscale had regressed to the mean but the negative change from T2 to T3 was not statistically significant. *Antagonistic judgement*, while not changing between the initial and second measurement had worsened significantly by 4-month follow-up (moderate effect size). On the emotional attitudes scale *negative attitudes* improved from T1 to T2 and this improvement was sustained at follow-up (moderate to large effect size). Finally, the *difficult to treat* subscale did not change across the three measurements.

Focus groups

Focus group participants were four nursing staff from the community day hospital (DH) and seven from the acute inpatient ward (AW). Analysis revealed three themes which capture participating nurses' reflections of the training programme and are demonstrated through examples drawn directly from data transcripts. Overall, the themes were distinct but not internally homogeneous in that theme exemplars did not represent a consensus. Instead, participants talked about experiences that fit the themes but differed in tone and emphasis leading us to conceptualise each as occurring on a continuum.

Theme 1: Evaluating content: new learning vs. old ground

Participants reported mixed responses to the Science of Borderline Personality Disorder. Those who valued it expressed appreciation for the content and hearing '*the actual science behind it'* (Mo, DH). However, appreciation was far from universal and others experienced the model as '*going over old ground*' (Liz, AW). One individual claimed their own expert-by-experience status, explaining *'we have had quite a few through our doors'* and '*we see so many people here with that condition I felt like we knew [all this]'* (Sue, AW). Some felt the content was more appropriate for undergraduate nursing level, while others questioned the validity of the underlying premise: *'It's basically saying that people are born with personality disorder, you know, it's in their genetics – I've not heard of that before'* (Jean, AW). Ultimately, some experienced the session as a threat: *'some of it was quite patronising because it's the complete opposite of how we manage things […] what the slides and things were saying was the complete opposite' (*Amanda, AW).

Wot R U Like? gained more positive reviews: *'the afternoon session was great, you know, and we would do that again'* (Karen, AW). Focus group participants found it to be informative and interesting. The opportunity to talk with the Community Mental Health Nurse (NM) involved with JM's care was seen as positive, but the most influential aspect was having a 'service user' (N.B., not JM's preferred term) present, as it *'brought a closer understanding of what she's going through – her emotions and how we go through our emotions'* (Liz, AW). Overall, the service user delivery was experienced as valuable and meaningful: *'the difficulty of being able to tap into somebody's experience and things and actually get to learn from that… there's a lot of meaning in there you know?'* (Joe, DH). Specifically, participants felt it was helpful to interact with someone with a BPD diagnosis who they perceived to be in recovery:

> *'We only ever see people when they're at their worst when they're here* [in the inpatient setting], *so it was good to see how she can reflect on when she was unwell when she was well'* (Karen, AW).

Participants felt this could offer *'hope'* to individuals going through similar difficulties and perceived JM's message to others to be *'This is what can be done... I've done it so you can do it as well'.*

Participants valued the suggestions made by JM for practice developments since her ideas were perceived as grounded in personal knowledge of the realities of the service and available resources:

> '*She* [JM] *recognises as somebody who's been through the service that, you know, there are gaps there, you know, we're no* [sic] *properly joined up, we work, we're not*

always consistent, all those sort of things happening in the system in the NHS, you know?' (Mo, DH).

Participants viewed the interventional resource provided by Wot R U Like? as of less practical utility than JM's story. Concerns over the Wot R U Like? resource pack were that it could be *'a bit much'* or *'become quite distressing'* for patients. Nevertheless, parts of the pack were seen as useful, such as for *'explaining their feelings and stuff'* (Katrina, DH).

Theme 2: Care setting: inpatient vs. day hospital experiences

This theme manifested in differing views and experiences of the training intervention and its relevance to the care setting in which individuals practiced. The mixing of inpatient and day hospital staff in the training intervention was in itself seen as a constructive:

'*a positive opportunity to network with different agencies involved in care, allowing the batting about of ideas and opinions'* (Mo, DH).

However, the combination of staff was also a source of tension as those from different care settings discussed the reality of their work context with specific course content.

'It kind of split the whole room apart because it was very much, "this is how you're meant to do it and you're doing it wrong", basically' (Sue, AW).

Day hospital nurses felt engagement with patients was less demanding than for acute ward nurses as they were *'not dealing with the kind of… more acute side … of the condition'.* They viewed theirs as the more rewarding working experience, one where they were able to *'see people that want to work towards recovery'*, while they perceived that ward staff were *'a bit at the… coal face with it' (Joe, DH).* Further, day hospital participants identified that a

useful element of their service delivery toolkit was their appointment system: '*it's one person coming in, you deal with that person'* (Mo, DH). Having diaries supported organisation and avoided '*the to-ing and fro-ing that the ward environment can bring'* (Mo, DH). This more ordered environment appeared to foster opportunity for self-development through structured one-to-one contact, *'you're making mistakes but you're learning from them, and the ward staff don't get that opportunity'* (Jack, DH). Self-development was also promoted by the day hospital environment offering nurses more time to learn *'you're able to do a wee bit more research so the educational aspect to it improves'* (DH).

In contrast, acute ward nurses perceived a general '*negativity on wards'* (Jim, AW) which was emphasised by the struggle to carve out time to provide care. This was felt to have a direct impact on relationships with patients. *'You can't give the… the one-to-one that they need and, you know, it gets very tense'* (Jim, AW). This led to participants espousing their ethos for working in the acute ward setting as being '*… not about the needs of the one, it's about the needs of the many'* (Sue, AW), and their priority was to maintain safety and fair support for all. They considered that those with a BPD diagnosis took a disproportionate amount of already limited resources and was a point of tension.

> *'They're getting more attention from the staff, you know? I mean if they've got like a ligature round their neck, you're pressing alarms, you've got three or four members of staff coming down, someone else could be just sitting at their bed space pretty quiet and be really unwell and they're no' getting any attention'* (Alison, AW)

Overall, the discussion around this theme emphasised that training interventions need to focus on the care setting where care is delivered so that learning could be translated into practice, particularly within the constraints of the acute ward setting: '[training] *needs to suit work in the acute ward'* (Liz, AW),

Theme 3: Longer-term reflections: change vs. stasis

As an overall experience, the intervention received mixed reviews in terms of impact. A positive aspect seemed to be simply the opportunity for the staff to reflect together: *'that time away, that space to think, and as a team…'* (Jack, DH).

Gaining insight into the perceived universality of feelings which occur for staff caring for BPD-diagnosed individuals was experienced as useful, allowing '*recognition that you're not on your own with the overriding emotions'* (Katrina, DH). The nurses reflected on the individual, relational nature of their profession, noting that '*it's a personal thing with nursing'* (Joe, DH). Importantly, nurse participants expressed an awareness of the initial reaction they might have to a patient with a BPD diagnosis, and the self-awareness that they have to develop to work with them:

> *'There's some people that you begin to dislike when they come in and sometimes that changes when you get to know them. And the challenge of it all, you know? Hanging in there and trying to do the right thing at the right time'* (Mo, AW).

The focus groups generated several ideas for future personal and organisational development. For example, some were unsure how to consolidate and maintain the learning they had received.

> *'I think the training was helpful, it's just how… you keep that going within your team's culture is really difficult'* (Jim, AW)

However, several participants were quick to report that there was no benefit from the training, and nothing had changed in practice.

> *'Nothing that's changed since… There was initial enthusiasm that dissipated very quickly* (Alison, AW).*'*

Some of these nurses explained that they had '*their own technique'*, or were '*used to working with the personalities'* (Liz, AW). One participant expressed frustration with the training, as their belief was patients should be *'taking responsibility for their own actions'* (Jean, AW); further:

> *'In hospital, you know, you've got to like talk to them, make them aware that they're self-harming and they should be cleaning up and things, not expecting staff to do it.* (Jean, AW).

Similarly, some participants expressed wariness over educational initiatives since they have the potential to distract from the practice of what they described as 'core' skills.

> *'You go in with this shiny new therapy that you can use and you forget to do the basic stuff of getting to know the person'* (Karen, AW)

It became apparent that some saw their nursing role as *'damage limitation'* (Mo, DH), and experienced pessimism around offering empathy.

> *'You're at that point whereby somebody can come in, you offer them care and asylum, then we have to discharge people and it's… "Bet they go and kill their self"'* (Jim, AW).

Discussion around the longer term value of training such as this touched on participants' understanding of what it really means to be a mental health nurse.

> *'We're not therapists, we're psychiatric nurses and if we're gonna' say, you know, this is a specific therapy this person needs… we can't deliver that, but try our best to prepare people for that'* (Jim, AW).

DISCUSSION

We brought together existing educational elements comprising biosocial (The Science of BPD) and expert-by-experience perspectives (Wot R U Like?) under the umbrella term of becoming Positive About Borderline. This paper has described the piloting and testing of the programme from both quantitative and qualitative perspectives. In terms of measurable change on attitudinal scores we found evidence of statistically significant change in four of five domains. While the desirability of that change was in an unwanted direction in terms of reported antagonistic judgements, this was on a subscale with questionable internal reliability. Further, significant change only occurred between T2 and T3 and, unlike changes on other subscales with better internal reliability, not immediately following the intervention. Positive changes on the treatment characteristics of people with a diagnosis of BPD, the perception of their suicidal tendencies as functional, and on negative attitudes in general were moderate (negative attitudes) and large and had been sustained at 4-month follow-up. There was no change in the perception of this group as difficult to treat. As a result, we can say that the results were mixed but mostly positive. The study highlights the difficulties in designing and demonstrating the efficacy of an intervention to change attitudes. Note, however, that even more complex interventions such as whole schedules of DBT training (e.g., Herschell et al, 2014) have not demonstrated clear benefits on these outcomes (Dickens et al. 2016b).

However, this was a small study and the intervention was only delivered on two occasions. In this context, the contribution of the second part of our study is of special interest since it appears to be the first qualitative analysis from the perspective of attendees receiving an educational intervention aimed at shifting attitudes towards individuals with a BPD diagnosis. Since we did not quantitatively evaluate the two distinct parts of the Positive About Borderline intervention separately we cannot say whether either aspect had a unique differential effect, whether positive or negative.

The qualitative data suggested that attendees welcomed the expert-by-experience (Wot R U Like?) input and found it informative and enlightening, certainly the experiential aspect. Participants largely felt very differently about the Science of BPD. While some found at least some interesting information the session was considered by participants, at best, to be a refresher of existing knowledge, commonly to be a waste of time, and even potentially detrimental to what were viewed as core skills already practiced. Despite this, there was clearly new information presented which challenged the in-group status quo view of BPD. Interestingly, using an admittedly relatively crude objective measure, our participants were *not* more knowledgeable than participants in previous studies which have used Cleary et al.'s (2002) questionnaire; for example, using the original sample as a reference, our participants had better knowledge on three items and poorer knowledge on four. For some, the idea that BPD might have an underlying biological and genetic basis came as a surprise. It is our experience from the UK-service setting that BPD is largely understood within a psychological trauma-informed paradigm in which it is seen as inherently linked with adverse childhood experiences including childhood sexual abuse (Menon et al., 2016), severe neglect, attachment ruptures, overprotection and invalidating environments (Mosquera et al., 2014). While The Science of BPD in no way diminishes the importance of historical trauma, it also links this with predisposing biological factors. Interestingly, while some participants clearly rejected what they considered to be a biological model, what they seemed to offer instead was a view that emphasised 'choice' and 'responsibility', issues which proponents of biosocial interventions would cite as reasons for the need for the sort of approach trialled here.

One of the key criticisms of the science of BPD approach was that it was not rooted in the realities of service provision as participants experienced it. Indeed, this perspective is reinforced by the contrast between enthusiasm for the experiential aspect of Wot R U Like?

and the more circumspect response to and lack of uptake of the interventional resource. Learning from JM's experience was described as valuable, particularly being able to understand her emotional journey, and being able to see someone in a position of recovery and hope rather than crisis. Participants were, however, reticent about the resources introduced during this session aimed at helping engagement with people diagnosed with BPD. Additionally, given that the focus groups occurred 4 months after the intervention, the reported use of the Wot R U Like? resource was patchy at best.

Ultimately, there were some vastly different opinions about what nursing actually means for those with a diagnosis of BPD and about the nurses' role in attempting to deliver therapies even where they have been shown to be beneficial. Receiving education on therapeutic interventions when nursing staff feel they lack the resources, or time to apply them was described as redundant and frustrating. To an extent, this seemed to link in to the different roles nurses took in the two care settings. While both the day hospital and acute ward worked within limited resources, those in the day hospital felt they had time to allow them to build patient relationships, care for themselves, function as a team, and engage with additional learning. The perceived lack of time on the ward was cited by participants as creating a negative atmosphere which impacted on interactions with patients and their families when expectations were not met. In the light of past interventions' failure to change attitudes significantly, perhaps the big question to ask is: would the full-scale systemic change of service provision that people who work with BPD-diagnosed individuals seem to feel is required actually improve care, or is it an impossible demand whose purpose is largely to shift responsibility for changing practice onto 'the system'? Some nurses appeared resistant to change from the outset, maintaining an adverse attitude towards BPD-diagnosed patients which led to frustration when the training did not validate that. This was recognised

by other team members who felt the training would struggle to have any practical momentum unless everyone on the team was on board.

Less pessimistically, themes emerging from the qualitative data, for example 'change versus stasis,' at least hinted that training and educational resources may be useful by giving participants the opportunity to come together and consider how they might move practice forward. Some clearly want to improve practice, and others to varying degrees did take something from the session. This suggests that regular sessions for nurses to get together in facilitated clinical supervision groups may be beneficial for both nurses and patient care (Bland & Rossen, 2005). For future learning participants suggested that needs included: consolidation of education and training to ensure application; more whole team networking; consistency across care; individual practical tools rather than introductions to therapeutic methods; and more service user input – particularly on what they wanted and needed from the services.

Limitations

The study has a number of important limitations. The study design was uncontrolled and no randomisation to a competing or TAU condition occurred. This limits the extent to which any changes might be attributed to the intervention itself. Retention of participants at four month follow-up was disappointing (60%) and this might affect confidence in the sustainability of changes if the responders and non-responders were significantly different in some important way. In any event, this was only a small study. On the other hand, the study is one of the first to incorporate an expert-by-experience element into staff training for attitudes to BPD and this was received positively from a qualitative perspective.

Conclusion

The current study demonstrates that an intervention for nursing staff can be delivered; it strongly indicates that involvement of an expert-by-experience in programme design and delivery is welcomed by participants. It highlights that there is a lack of consensus among nurses themselves about what related training they need. It further adds to existing evidence (Clark et al., 2015) that a science of BPD approach seems to have positive benefits despite its controversial nature. Future studies will need to further clarify the content of a training intervention for attitudes to BPD. They may also need to separate evaluation where there is more than one element in order to determine which is the 'active ingredient'. Future studies need to be larger in scope and employ appropriate control groups.

Relevance to clinical practice

People with a diagnosis of borderline personality disorder are some of the most frequent users of mental health services. They and their families appear to be fully aware that they receive a poorer service than other mental health service users. This was acknowledged in a report by the NHS National Institute for Mental Health in England [NIMHE] (2003) entitled, ‘No longer a diagnosis of exclusion’. This report considered the issue to relate to mental health professionals believing that they have neither the skills, training nor resources to provide an adequate service, and there is nothing mental health services can offer. Similarly, our study found mental health nurses opining that the problem is structural and systemic and requires addressing at organisational level. However, this cannot entirely explain the relatively poorer attitudes of nurses compared with other health care professionals. Nurses need to take responsibility for role modelling appropriate therapeutic attitudes and for checking some of the negative attitudes of their colleagues where they occur.

REFERENCES

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (5th Ed.)*. Washington, DC: Author.

Aviram, R.B., Brodsky, B.S. & Stanley, B. (2006). Borderline personality disorder, stigma, and treatment implications. *Harvard Review of Psychiatry*, 14, 249–256. DOI: 10.1080/10673220600975121

Bland, A.R. & Rossen, E.K. (2005). Clinical supervision of nurses working with patients with borderline personality disorder. *Issues in Mental Health Nursing*, 26(5), 507-517. DOI: 10.1080/01612840590931957

Bodner, E., Cohen-Fridel, S. & Iancu, I. (2011). Staff attitudes toward patients with borderline personality disorder. *Comprehensive Psychiatry*, 52(5), 548-555. DOI: 10.1016/j.comppsych.2010.10.004

Bodner, E., Cohen-Fridel, S., Mashiah, M., Segal, M., Grinshpoon, A., Fischel, T., & Iancu, I. (2015). The attitudes of psychiatric hospital staff toward hospitalization and treatment of patients with borderline personality disorder. *BMC Psychiatry* 15(2). DOI:10.1186/s12888-014-0380-y

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. DOI: https://doi.org/10.1191/1478088706qp063oa

Bradley, E. (2015). Carers and co-production: enabling expertise through experience? *Mental Health Review Journal,* 20(4), .232-241. DOI: https://doi.org/10.1108/MHRJ-05-2014-0016

Clark, C.J., Fox, E., & Long, C.G. (2015). Can teaching staff about the neurobiological underpinnings of borderline personality disorder instigate attitudinal change? *Journal of Psychiatric Intensive Care*, 11(1), 43-51. DOI: http://dx.doi.org/10.1017/S1742646414000132

Cleary, M., Siegfried, N. & Walter, G. (2002). Experience, knowledge and attitudes of mental health staff regarding clients with a borderline personality disorder. *International Journal of Mental Health Nursing*, 11, 186–191. DOI: https://doi.org/10.1046/j.1440-0979.2002.00246.x

Cohen, J. (1977). Statistical *power analysis for the behavioral sciencies*. London: Routledge.

Commons Treloar, A.J. & Lewis, A.J. (2008). Targeted clinical education for staff attitudes towards deliberate self-harm in borderline personality disorder: randomized controlled trial. *The Australian and New Zealand Journal of Psychiatry* 42(11), 981-988. DOI: 10.1080/00048670802415392

Comtois, K.A. & Carmel, A. (2014). Borderline personality disorder and high utilization of inpatient psychiatric hospitalization: Concordance between research and clinical diagnosis. *The Journal of Behavioral Health Services and Research*. DOI: 10.1007/s11414-014-9416-9

Dickens, G.L., Lamont, E., & Gray, S. (2016a). Mental health nurses' attitudes, behaviour, experience and knowledge regarding adults with a diagnosis of borderline personality disorder: systematic, integrative literature review. *Journal of Clinical Nursing*, 25, 1848-1875. DOI: 10.1111/jocn.13202

Dickens, G.L., Hallett, N., & Lamont, E. (2016b). Interventions to improve mental health nurses' skills, attitudes, and knowledge related to people with a diagnosis of borderline personality disorder: systematic review. *International Journal of Nursing Studies*, 56, 114-127. DOI:10.1016/j.ijnurstu.2015.10.019

Elisei, S., Verdolini, N. & Anastasi, S. (2012). Suicidal attempts among emergency department patients: One year of clinical experience. *Psychiatria Danubina,* 24, 140-142.

Fraser, K. & Gallop, R. (1993). Nurses' confirming/disconfirming responses to patients diagnosed with borderline personality disorder. *Archives of Psychiatric Nursing*, 7(6), 336-341. DOI:10.1016/0883-9417(93)90051-W

George, D. & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference. 11.0 Update. 4th Edition*. Allyn & Bacon, Boston, MA.

Grant, B., Chou, S.P., Goldstein, R.B., Huang, B., Stinson, F.S., Saha, … & Ruan, W.J. (2008). Prevalence, correlates, disability, and comorbidity of DSM-IV Borderline Personality Disorder: Results from the Wave 2 National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*, 69(7), 533–545.

Hayashi, N., Igarashi, M., Imai, A., Osawa, Y., Utsumi, K., Ishikawa, Y., Tokunaga, T., Ishimoto, K., Harima, H., Tatebayashi, Y., Kumagai, N., Nozu, M., Ishii, H., & Okazaki, Y., (2010). Psychiatric disorders and clinical correlates of suicidal patients admitted to a psychiatric hospital in Tokyo. *BMC Psychiatry*,10. DOI:10.1186/1471-244X-10-109

Hazelton, M., Rossiter, R., & Milner, J. (2006). Managing the 'unmanageable': Training staff in the use of dialectical behaviour therapy for borderline personality disorder. *Contemporary Nurse,* 21: 120-130. DOI: http://dx.doi.org/10.5172/conu.2006.21.1.120

Herschell, A.D., Lindhiem, O.J., Kogan, J.N., Celedonia, K.L., & Stein, B.D. (2014). Evaluation of an implementation initiative for embedding Dialectical Behavior Therapy in community settings. *Evaluation and Program Planning*, 43, 55-63. DOI: 10.1016/j.evalprogplan.2013.10.007

Holloway, I. & Galvin, K. (2016). *Qualitative Research in Nursing and Healthcare (4th Ed.).* Wiley-Blackwell: London.

Jorm, A.F. & Griffiths, K.M. (2008). The public's stigmatizing attitudes towards people with mental disorders: how important are biomedical conceptualizations? *Acta Psychiatrica Scandinavica,* 118(4), 315-321. doi: 10.1111/j.1600-0447.2008.01251.x

Kale K & Dantu K (2015) *Clinicians attitude towards patients with Borderline Personality. A Survey Summary.* RCPsych in Wales ENewsletter – Winter/Spring. Available at: http://www.rcpsych.ac.uk/workinpsychiatry/divisions/rcpsychinwales/news/enewsletterwinter-spring2015.aspx

Knaak, S., Szeto, A.C.H., Fitch, K., Modgill, G., Patten, S., 2015. Stigma towards borderline personality disorder: effectiveness and generalizability of an anti-stigma program for healthcare providers using a pre-post randomized design. *Borderline Personality Disorder and Emotion Dysregulation*, 2(9). DOI: 10.1186/s40479-015-0030-0

Krawitz, R. (2004). Borderline personality disorder: attitudinal change following training. *Australian and New Zealand Journal of Psychiatry*, 38(7), 554-559. DOI: 10.1080/000486700675

Lieb, K., Zanarini, M.C., Schmahl, C., Linehan, P.M.M., & Bohus, P.M. (2004). Borderline personality disorder. *Lancet*, 364, 453–461. DOI: https://doi.org/10.1016/S0140-6736(04)16770-6

Linehan, M. (1993). *Cognitive-behavioral Tratment of Borderline Personality Disorder.* Guilford Press: New York, NY.

Markham, D. & Trower, P. (2003). The effects of the psychiatric label 'borderline personality disorder' on nursing staffs' perceptions and causal attributions for challenging behaviours. *British Journal of Clinical Psychology*, 42, 243-256. DOI: 10.1348/01446650360703366

Menon, P., Chaudhari, B., Saldanha, D., Devabhaktuni, S., & Bhattacharya, L. (2016). Childhood sexual abuse in adult patients with borderline personality disorder. *Industrial Psychiatry Journal*, 25(1), 101-106. DOI: 10.4103/0972-6748.196046

Miller, S.A. & Davenport, N.C. (1996). Increasing staff knowledge of and improving attitudes toward patients with borderline personality disorder. *Psychiatric Services*, 47(5), 533-535. DOI: 10.1176/ps.47.5.533

Mosquera, D., Gonzalez, A., & Leeds, A.M. (2014). Early experience, structural dissociation, and emotional dysregulation in borderline personality disorder: the role of insecure and disorganized attachment. *Borderline Personality Disorder and Emotion Dysregulation*, *1*, 15. DOI: http://doi.org/10.1186/2051-6673-1-15

National Institute for Mental Health in England. (2003). *Personality Disorder: No Longer a Diagnosis of Exclusion.* London: NIMHE. Available at: http://personalitydisorder.org.uk/wp-content/uploads/2015/04/PD-No-longer-a-diagnosis-of-exclusion.pdf [Accessed 20th June 2018]

Nursing and Midwifery Council (2015). *The Code: Professional Standards of Practice and Behaviour for Nurses and Midwives.* Author: London. Available at: https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf [Accessed 28th May 2015]

Pinfold, V., Szymczynska, P., Hamilton, S., Peacocke, R., Dean, S., Clewett, N., Manthorpe, J., & Larsen, J. (2015). Co-production in mental health research: Reflections from the People Study. *Mental Health Review Journal*, 20, 220 – 231. DOI: 10.1108/MHRJ-09-2015-0028

Porr, V. (2010). *Ovecoming Borderline Personality Disorder: A Family Guide for Healing and Change.* Oxford: Oxfored University Press.

Shanks, C., Pfohl, B., Blum, N., Black, D.W., 2011. Can negative attitudes toward patients with borderline personality disorder be changed? The effect of attending a STEPPS workshop. *Journal of Personality Disorders*, 25(6), 806-812. DOI: 10.1521/pedi.2011.25.6.806

Stringer, B., Van Meijel, B., Koekkoek, B., Kerkhof, A., & Beekman, A. (2011). Collaborative care for patients with severe borderline and NOS personality disorders: A comparative multiple case study on processes and outcomes. *BMC Psychiatry*, 11, 102. DOI:10.1186/1471-244X-11-102

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357.

von Elm, E., Altman, D.G., Egger, M., Pocock, S.J., Gotzsche, P.C., & Vandenbroucke, J.P. (2007). The Strengthening the Reporting of Observational Studies in Epidemiology

(STROBE) Statement: guidelines for reporting observational studies. *BMJ*, 335(7624):806-808.

Table 1: Demographic, experience and knowledge details of participants at key study points

	T1 and T2 ***N=28***	**T3** ***N*=16**	**Focus Group** ***N*=11**
	n (%)	***n (%)***	***n(%)***
Nursing status			
Registered Mental Health Nurse	25	15	10
Healthcare Assistant	3	1	1
Sex			
Male	7	4	5
Female	21	12	6
Age:			
<31 years	9	6	-
31-40 years	2	1	-
41-50 years	5	2	-
51+ years	12	7	-
			-
Self-rated working with BPD experience			
'Some'	4	-	-
Moderate	9	-	-
Extensive	15	-	-
			-
Knowledge Questionnaire Score (max score 7)			
Mean (SD)	4.7 (1.5)	-	-
Range	1-7	-	-
Maximum score	3 (10.7%)	-	-
Score >50%	24 (85.7%)	-	-
		-	-
Working with people with BPD is difficult (somewhat/moderately/very)	25 (89.3%)	-	
		-	
Working with this group is more difficult than working with others	16 (57.1%)	-	-

T1 = Time 1 (Pre-training baseline); T2 = Time 2 (Post-training); T3 = Time 3 (4-month follow-up)

Table 2: Change in cognitive and emotional attitudes mean (SD) item score at pre- and post-training and 4-month follow up

	Mean (SD) T1	Mean (SD) T2	Mean (SD) T3	Friedman Test	Wilcoxon Test*	Effect size *d*
Cognitive Factor 1 Treatment characteristics	2.79 (0.42)	3.07 (0.28)	3.08 (0.39)	*N*=16, χ2=13.51, df=2, p=.001	T2>T1 p=.009 [a]	0.8
Cognitive Factor 2 Perception of suicidal tendencies	2.96 (0.49)	3.64 (0.33)	3.07 (0.36)	*N*=16, χ2=7.2, df=2, p=.027	T2>T1 p<001 [a]	1.66
Cognitive Factor 3 Antagonistic judgement	3.08 (0.45)	2.97 (0.24)	2.80 (0.28)	*N*=16, χ2=19.1, df=2, p=<.001	T3<T1 p=.043	0.56
Emotional Factor 1 Negative attitudes	2.18 (0.67)	2.54 (0.43)	2.57 (0.29)	*N*=16, χ2=17.9, df=2, p<.001	T2>T1 p=.02 [a] T3>T1 p=.041 [a]	0.72 1.03
Emotional Factor 2 Difficult to treat	2.58 (0.67)	2.4 (0.57)	2.37 (0.57)	*N*=16, χ2=1.23, df=2, p=0.541	-	-

N=16 except [a] *N*=28; T1 = Time 1 (Pre-training baseline); T2 = Time 2 (Post-training); T3 = Time 3 (4-month follow-up)

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